

## CLAIMS

### WHAT IS CLAIMED:

1. An interconnect for a location dependent device, comprising:  
 at least one bus adapted to provide at least one bus signal to the location dependent  
 5 device; and

a plurality of electrical contacts external to the location dependent device and capable  
 of providing a signal indicative of a physical location of the location dependent device when  
 the location dependent device is installed.

10 2. The interconnect of claim 1, wherein the plurality of electrical contacts includes:  
 a first electrical contact capable of providing a reference; and  
 at least one second electrical contact electrically coupled to the first electrical contact,  
 the second electrical contact being adapted to contact a corresponding electrical contact on  
 the location dependent device when the location dependent device is installed.

15 3. The interconnect of claim 2, wherein the at least one second electrical contact is at  
 least one of a socket and a solderable electrical contact.

20 4. The interconnect of claim 2, wherein the first electrical contact is adapted to contact a  
 corresponding electrical contact on the location dependent device when the location  
 dependent device is installed.

5. The interconnect of claim 4, wherein the first electrical contact is at least one of a  
 socket and a solderable electrical contact.

6. The interconnect of claim 1, wherein the electrical contact includes:

a first electrical contact capable of providing a reference; and

at least one second electrical contact optionally electrically coupled to the first  
 5 electrical contact, the at least one second electrical contact being adapted to contact a  
 corresponding electrical contact on the location dependent device when the location  
 dependent device is installed.

7. The interconnect of claim 6, further comprising at least one fuse deployed  
 10 intermediate the first electrical contact and the at least one second electrical contact such that  
 the at least one second electrical contact is capable of being optionally electrically coupled to  
 the first electrical contact.

8. The interconnect of claim 1, further comprising at least one circuit element deployed  
 15 intermediate the first electrical contact and the at least one second electrical contact.

9. The interconnect of claim 8, wherein the at least one circuit element comprises at least  
 one of a resistor, a capacitor, a voltage reference circuit, and a trace having a selected  
 resistance.

10. The interconnect of claim 9, wherein at least one of a trace length and a trace cross-  
 section are selected to provide the selected trace resistance.

11. The interconnect of claim 1, wherein the at least one bus comprises at least one trace adapted to provide at least one of a control signal, a command signal, and a power signal to the location dependent device.

12. The interconnect of claim 1, wherein the location dependent device is at least one of a motor, an initiator, and a sensor.

13. A system for determining a position of at least one location dependent device deployed on a vehicle, comprising:

at least one bus capable of transmitting at least one bus signal;

a plurality of interconnects, each being capable of receiving the bus signal from the bus and providing the bus signals to at least one location dependent device associated with the interconnect; and

a plurality of electrical contacts, at least two of the plurality of electrical contacts being associated with each of the interconnects and being capable of providing a signal indicative of a physical location of the interconnect to the location dependent device associated with the interconnect when the location dependent device is installed.

14. The system of claim 13, wherein each of the electrical contacts associated with each of the plurality of interconnects includes:

a first electrical contact capable of providing a reference; and

at least one second electrical contact electrically coupled to the first electrical contact, the second electrical contact being adapted to contact a corresponding electrical contact on the location dependent device when the location dependent device is installed.

15. The system of claim 14, further comprising at least one circuit element deployed intermediate the first electrical contact and the at least one second electrical contact.

16. The system of claim 15, wherein the at least one circuit element comprises at least one of a resistor, a capacitor, a voltage reference circuit, and a trace having at least one of a selected length and a selected cross section.

17. The system of claim 13, wherein each of the electrical contacts associated with each of the plurality of interconnects includes:

a first electrical contact capable of providing a reference; and

at least one second electrical contact optionally electrically coupled to the first electrical contact, the second electrical contact being adapted to contact a corresponding electrical contact on the location dependent device when the location dependent device is installed.

18. The system of claim 13, wherein the at least one bus comprises at least one trace adapted to provide at least one of a control signal, a command signal, and a power signal to the at least one location dependent device.

19. The system of claim 13, further comprising a controller communicatively coupled to the bus and capable of providing the bus signal comprising at least one of a control signal, a command signal, and a power signal to the bus.

20. The system of claim 13, wherein the location dependent device is at least one of a location dependent sensor, a location dependent initiator, and a location dependent motor.

21. The system of claim 13, wherein the vehicle is at least one of an automobile and an airborne vehicle.

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